2006
ANNUAL BRIDGE REPORT
of the

Department of Transportation
Road Services Division
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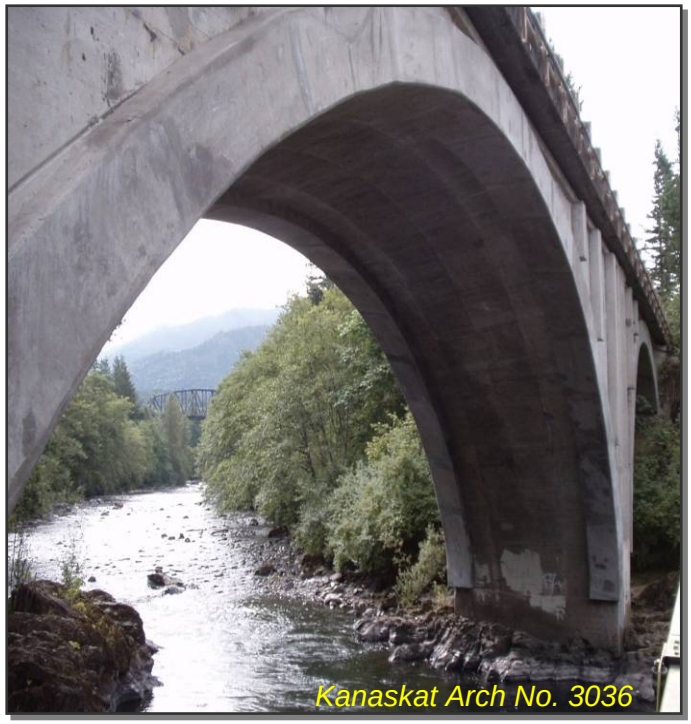
I. INTRODUCTION

This bridge report is prepared by King County Road Services Division each year to fulfill requirements of the Washington Administrative Code (WAC) 136-20-060. This WAC requires the County Road Engineer's report of bridge inspections as follows:

"Each county engineer shall furnish the county legislative authority with a written resume of the findings of the bridge inspection effort. This resume shall be made available to said authority and shall be consulted during the preparation of the proposed six-year transportation program revision. The resume shall include the county engineer's recommendations as to replacement, repair or load restriction for each deficient bridge. The resolution of adoption of the six-year transportation program shall include assurances to the effect that the county engineer's report with respect to deficient bridges was available to said authority during the preparation of the program."


Kanaskat Arch No. 3036

This report summarizes the county's 2006 bridge programs, activities, and findings. These programs form an integrated and comprehensive strategy to maintain and preserve the county's bridges and the continuity of the roadway network. The three main goals of the bridge programs are:

1. Keep the bridges open and safe for public use.
2. Preserve bridge infrastructure by maximizing its useful life through active maintenance, retrofitting, and rehabilitation.
3. Replace bridges with reliable new structures when repair or rehabilitation is not feasible.

With limited revenues and many unfunded transportation needs in King County, emphasis is placed on preserving the existing bridge infrastructure. A number of repair programs, coupled with seismic retrofit and bridge rehabilitation programs, ensure that the useful life of the current bridge inventory is maximized. In some cases, however, bridges cannot be feasibly upgraded, and these structures are replaced. Additional information on King County bridges is available at:
http://www.metrokc.gov/kcdot/roads/index.cfm

II. BRIDGE INVENTORY

The Road Services Division inspects and inventories 270 bridges located in all reaches of King County from Vashon Island to Enumclaw to Skykomish and beyond. Of these bridges:

- 179 bridges are wholly owned by King County Road Services Division.
- 6 bridges are co-owned with cities.
- 75 bridges are wholly owned by cities and inspected under contract.
- 10 bridges are owned by King County Department of Natural Resources and Parks (DNRP). The Road Services Division inspects and inventories these DNRP bridges because the bridges span above public roadways or the bridges are conveying traffic on a public roadway within a park.

Throughout the report, several references are made to specific bridges, each of which is uniquely identified by name and number, e.g., **Bear Creek Bridge No. 333A.** In order to assist the reader, the complete bridge inventory and location descriptions are included in Table One in the Appendix.

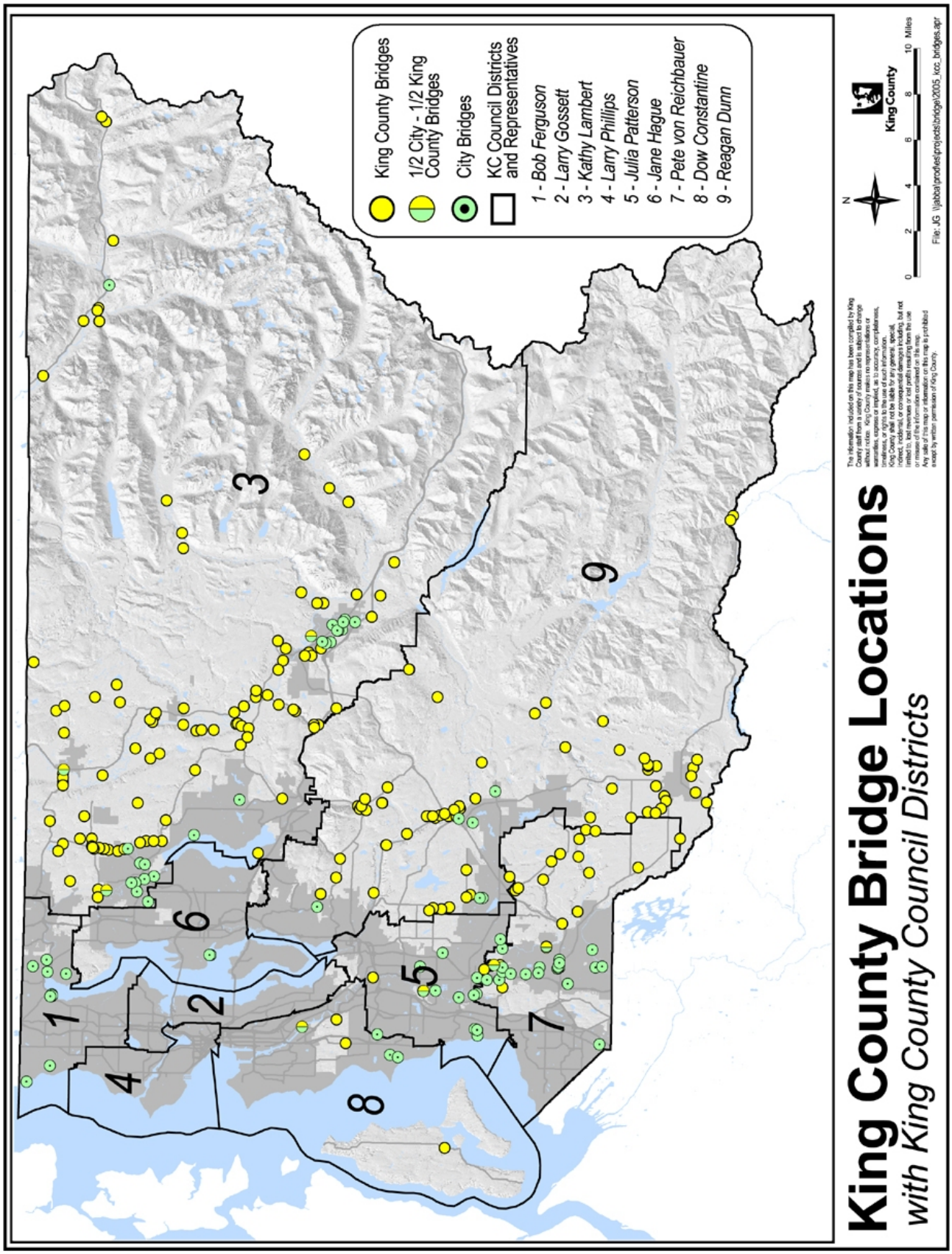
Consistent with the Revised Code of Washington Chapter (RCW) 39.34, the Interlocal Cooperation Act, the Road Services Division shares costs in maintaining or replacing bridges that are jointly owned under the provisions of interlocal agreements. The Road Services Division also performs contract work on city-owned bridges for cities that lack the resources and expertise to inspect or maintain their own bridge inventory.

Table Two in the Appendix, "Inventoried Bridges Owned by Cities," summarizes the bridges owned by other cities that the Road Services Division now inspects and, in some instances, maintains and repairs under contract.

The following map illustrates the distribution of the county-owned, partially county-owned and city-owned bridges throughout the county, in each council district.

Pile and scour inspection in channel

Upper chord inspection


King County Bridges
1/2 City - 1/2 King County Bridges
City Bridges
KC Council Districts and Representatives
1 - Bob Ferguson
2 - Larry Gossett
3 - Kathy Lambert
4 - Larry Phillips
5 - Julia Patterson
6 - Jane Hague
7 - Pete von Reichbauer
8 - Dow Constantine
9 - Reagan Dunn
King County
0 2 4 6 8 10 Miles
N
King County Bridge Locations
with King County Council Districts

III. BRIDGE INSPECTION FINDINGS AND REPAIRS

A. Bridge Inspection Findings

The National Bridge Inspection Standards (NBIS) mandates that public agencies inspect and report on all bridges at least once every two years. Under these standards, the county is required to document and report the current condition of each bridge, determine the degree of wear and deterioration, and recommend repairs or needed services. Bridges deficient in their condition require more frequent inspection, as do those bridges with deteriorating timber members. A total of 176 routine bridge inspections were conducted in 2006. During these bridge inspections, inspectors made an in-depth evaluation of the condition of the bridge structure and documented any observable defects. When the inspection revealed a deficiency, a maintenance work order was generated and assigned a priority. Urgent structural or safety concerns were promptly addressed.

Inspecting timber towers

Bridge inspection reports were then catalogued and filed with the Road Services Division. Several times during the year, updated inspection results were forwarded to the Washington State Department of Transportation (WSDOT) Highway and Local Programs Division which in turn verified compliance with the NBIS and reported to the Federal Highway Administration (FHWA).

One measure that provides an overview of the condition of the inventory is a rating factor known as the Sufficiency Rating (SR). The average SR of the entire inventory provides a comparative look at the health of the inventory from one year to the next. The SR is a score calculated for each bridge based on a multitude of ratings the inspector assigns to the bridge based on the condition of the various components of the bridge. The geometric layout, safety, traffic volume and the length of the detour route (In the event of a closure) is also factored into the SR. The SR ranges from zero (a bridge that is closed and cannot carry traffic loads) to 100 (a new bridge with no deficiencies). The average SR over the last five years for bridges in King County roadways is shown below.

Year	2002	2003	2004	2005	2006
Sufficiency Rating (SR)	64.1	65.9	67.1	68.2	68.3

Overall, the SR for the county inventory of bridges has varied little over the past years. This is due to the large number of bridges in the inventory, which prevents the benefit of each year's new bridges and new repairs from significantly increasing the SR average. Considering that the inventory continues to age, maintaining the current average SR is a significant accomplishment.

B. Repairs and Flood Damage

As bridges begin to age, certain components of the bridges require repair. The county's maintenance program to repair and replace worn or broken components extends the life of the bridge inventory, and corrects any immediate safety deficiencies. The goal of the repairs is to remove hazards and provide for preservation of infrastructure in a cost-efficient manner. Common repairs include replacing cracked concrete, rotted timber, corroded steel, or otherwise deteriorated components of the bridges. The following is a discussion of a few of the larger bridge repairs in 2006.

Tolt Bridge No. 1834A –Repairs included replacing portions of the corroded steel deck on this 84-year old bridge. Although construction started on the new bridge in 2006, these repairs will allow the existing bridge to continue carrying traffic during the construction process of the new bridge.

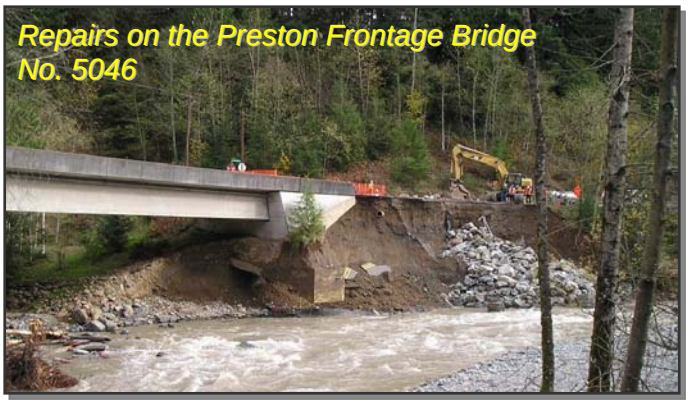
Sunday Creek Bridge No. 364C - This bridge is one of three remaining timber log stringer bridges left in the inventory. The condition of the timber log stringers had been deteriorating slowly; a recent increase in logging traffic caused an abrupt change in the bridge degrading it much faster then predicted. Temporary shoring was put in place to allow the bridge to remain open. A long term solution is currently being developed.


Sunday Creek Bridge No. 364C

In November 2006 the Puget Sound area experienced severe weather producing record flooding on many streams and rivers in King County. The Snoqualmie and Skykomish rivers both escalated to record setting flow. While the Raging River did not set a historic record, however the flow of 4,310 cubic feet per second did set the second highest level ever recorded at the Preston gage station. During this event several King County bridges sustained damage from scour and debris impacts.


Flood damage at Preston Frontage Road

Preston-Frontage Bridge No. 5046 – This concrete box girder bridge spanning the Raging River sustained



significant damage during the floods of November 2006.
The heavy rains raised the levels of the river and directed the river flow into the east abutment of the Preston Frontage Bridge. Within hours, the river had scoured the soil from beneath about half of the abutment. Emergency repair plans were drafted and implemented; equipment and a contractor were mobilized, and the bridge was shored up within 24 hours. All repairs were completed within seven days.

Baring Bridge No. 509A - Repairs to this bridge consisted of replacing or repairing various timber and steel members. The severe weather and flooding in November 2006 raised the river levels to bottom of the bridge deck allowing floating timber debris to damage the deck and railing. This bridge requires above average maintenance on a yearly basis. A large repair plan is planned for 2007 and 2008 which should reduce the amount of yearly maintenance required. This bridge provides sole access across the Skykomish River to approximately 147 parcels of land.

IV. LOAD-LIMITED BRIDGES

In 2006 substantial progress was made towards reducing the number of load-limited bridges in King County. The **York Bridge No. 225C** was replaced and **Horseshoe Lake Creek Bridge No. 257Z** was upgraded removing the load restrictions by adding additional timber stringers to the existing structure.
The following is a summary of the six remaining load-limited bridges:

Load Limited Bridges

Bridge Name	Bridge No.	Action	Planned Construction Completion
Tolt	1834A	Replacement	2008
Mount Si	2550A	Replacement	2009
Wagners	364B	Replacement	2007
Miller River	999W	Load upgrade	2008
Baring	509A	Major repairs	2007
Alvord T	3130	Pending study in 2007	

The **Tolt Bridge No. 1834A** replacement project is discussed in Section V of this report. The **Mount Si Bridge No. 2550A**, and **Wagners Bridge No. 364B** replacement projects are discussed in Section VIII of this report.

Miller River Bridge No. 999W

The **Miller River Bridge No. 999W,** near Skykomish, is an 81-year old steel truss bridge in good condition that serves the needs of the local community. It is a designated King County Landmark. The bridge, which spans the Miller River, is on the alternate route for State Route 2. In 2006, the Road Services initiated a study of the bridge to investigate a seismic retrofit and the feasibility of improving the load capacity. The construction is anticipated to be complete in 2008.


Baring Bridge No. 509A

The **Baring Bridge No. 509A** is a light-duty timber suspension bridge that crosses the Skykomish River in the town of Baring. The bridge is a King County Landmark and provides sole access to the community south of the Skykomish River. The bridge requires annual inspections and often several repairs each year.
The timber towers that support the suspension cables are rotting, but the tower strength is adequate for the current load limit.
An operational study of this bridge was completed in 2006. The study determined that the most appropriate course of action for this bridge was a continuation of annual inspections and major repairs in 2007 and 2008.


Alvord T Bridge No. 3130

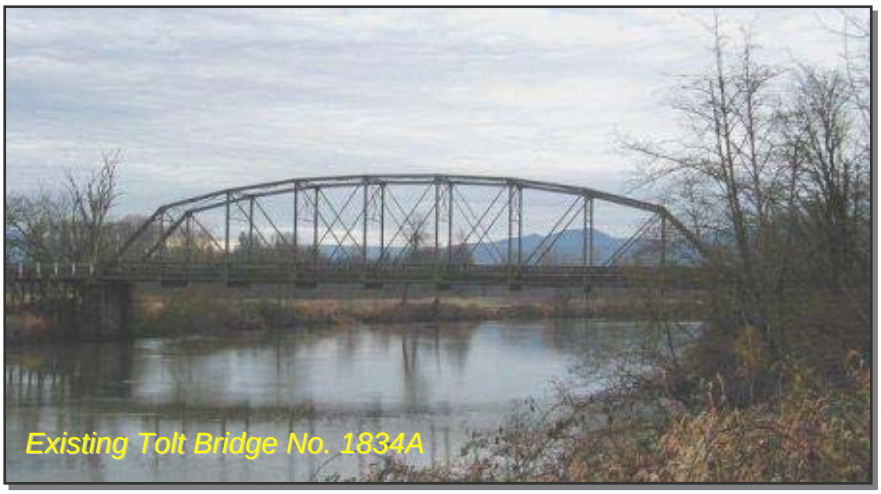
The **Alvord "T" Bridge No. 3130** is a steel through-truss that crosses the Green River at Third Avenue South near the city limits of Kent. Because the bridge is in Kent's potential annexation area, the county entered into an agreement with the city. In 1997, the county agreed to maintain and operate the bridge in its current condition, pending annexation, until traffic flow patterns were

established following improvements to South 277th Street. The South 277th Street Corridor Project was completed and fully opened to traffic in August 2005. An operational study is planned in 2007 to help determine the most feasible course of action for this bridge crossing.

V. BRIDGE CONSTRUCTION IN 2006

Although repairs can prolong the life of a bridge, when a bridge reaches the end of its useful life it must be either extensively rehabilitated or completely replaced. Capital improvements to a bridge are scheduled when repairs and routine maintenance cannot rectify problems, such as, inadequate load-carrying capacity. The following projects were completed or underway in 2006.

The **Tolt Bridge No. 1834A** in the Carnation area is one of the oldest bridges in King County, built in 1922. This bridge has required extensive steel and timber repairs to keep it open to load-limited traffic. Construction of a new bridge began in 2006 and will be completed in 2008. The new bridge will use two adjoining steel trusses, each 300 feet long, to span both the Snoqualmie River and the environmentally-sensitive west bank wetland.



Existing Tolt Bridge No. 1834A

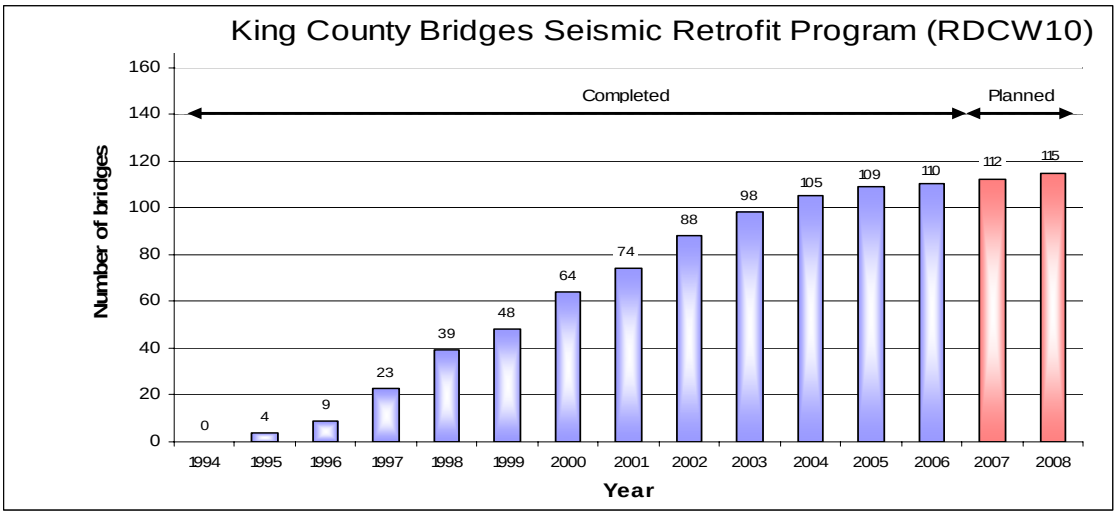
The new bridge is located 165 feet south of the existing bridge and will feature improved sight distance, 8 foot shoulders for pedestrian and bicyclist safety, water quality and wetland mitigation.

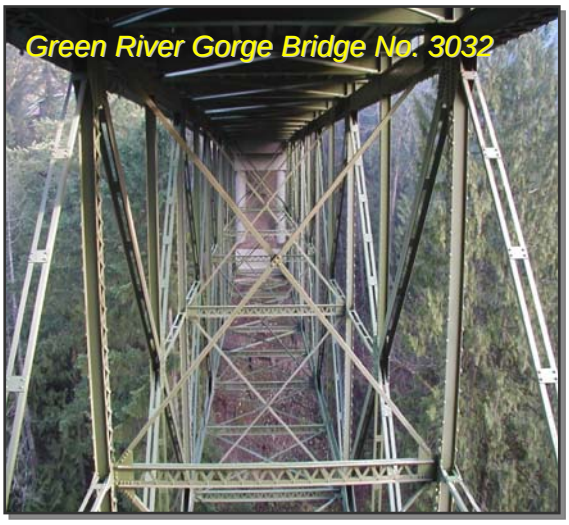
Construction of the new Tolt Bridge No. 1834A

The new **York Bridge No. 225C** spans the Sammamish River at NE 116th Street, and was opened for public use on November 1, 2006. The concrete arch bridge includes new roadway approaches, sidewalks, bicycle lanes, roadway/trail grade separation, a parking lot, sensitive area mitigation, and a kayak launch. The replacement bridge project, a 4Culture art recipient, incorporates several artistic features including curved sidewalks with widened areas that provide pedestrians refuge to view the river from the bridge. In addition decorative art is attached to custom curved pedestrian railings. The design greatly improves pedestrian safety on the Sammamish trails by placing the trail crossings underneath the bridge.

VI. BRIDGE SEISMIC RETROFIT PROGRAM

In 1994 King County initiated a Bridge Seismic Retrofit Program. This program is predicated on the known seismic activities in King County and on the risk a major seismic event poses to the public. Construction work began in 1995 and the Road Services Division expects to complete the implementation phase of the Program in 2008. Of the 115 bridges in the program, 110 have been strengthened to withstand earthquakes.





In 2006, the program accomplishments included the **Greenwater Bridge No. 3050B** retrofit construction as well as continuous advancement on the seismic design of **Veazie Creek Bridge No. 3038** , **15 Mile Creek Bridge No. 1384A**, and **Green River Gorge Bridge No. 3032**.
In addition, design efforts for two more bridges, **Miller River Bridge No. 999W** and **Welcome Lake Bridge No. 63** were initiated. The table below summarizes the program activities in 2006, as well as the planned activities in 2007-08.

BRIDGE SEISMIC RETROFIT PROGRAM ACTIVITIES

Bridge No.	Bridge Name	Design Start	Construction Year	Phase
3050B	Greenwater Bridge	2003	2005-2006	Completed 2006
3038	Veazie Creek Bridge	2003	2007	Design
3032	Green River Gorge Bridge	2005	2008	Design
1384A	15 Mile Creek Bridge	2005	*Completed technical report 2006 Action will be determined 2007.*	Study/Design
999W	Miller River Bridge	2006	2008	Study/Design
63	Welcome Lake Bridge	2006	2007	Design

VII. BRIDGE NEEDS REPORT

The Bridge Needs Report identifies candidate projects through application of the King County Priority Process for bridge replacement, approved by the King County Council in 1994 (Ordinance 11693). The priority process establishes relative ranking and prioritizes individual bridge replacements. The process scores the bridges by adequacy, weighing the functional and structural characteristics or deficiencies of each bridge, assigning a weighting factor, and producing a total rating. The results from this priority process are then used to program major bridge construction projects.

In recent years the Road Services Division has corrected many of the worst safety and operational deficiencies on bridges in the county roadway system. Over the past decade 18 of the highest priority bridge replacement and rehabilitation projects have been completed, including the York Bridge, which was opened to traffic in 2006. In the coming decade the bridge programs will continue to improve or replace the bridges with structural or operational deficiencies. The current Bridge Needs Report is listed below.

Bridge Needs Report

	Bridge No.	(LM) King County Landmark Bridge Name	Total Rating	CIP #	Project Start	Const Start	Planned Improvements
1	1834A	Tolt Bridge (LM)	75.40	200394	1995	2006	Replace bridge
2	2550A	Mount Si Bridge (LM)	69.50	200994	1999	2007	Replace bridge
3	3130	Alvord "T" Bridge	66.84	N/A	N/A	N/A	Operational study of bridge
4	509A	Baring Bridge (LM)	66.81	M69214	2007	2007	Major repairs
5	3179	South Park Bridge (LM)	63.70	300197	1998	TBD	Replace bridge
6	364B	Wagners Bridge	61.09	200604	2004	2007	Replace bridge
7	999W	Miller River Bridge (LM)	49.50	M72216	2006	2008	Seismic retrofit / load upgrade
8	3086OX	Berrydale Overcrossing	47.93	400600	2000	2011	Replace bridge (Need agreement with BNSF)
9	920A	Rutherford Slough	44.69	200107	2006	2007	Replace bridge
10	359D	Lake Dorothy Overflow	44.53	N/A	N/A	N/A	No improvements planned
11	180L	Patterson Creek	44.49	200108	2008	2011	Replace bridge
12	364C	Sunday Creek	40.87	M69236	2008	2008	Replace bridge
13	2133A	Sikes Lake Trestle	39.96	N/A	N/A	N/A	No improvements planned
14	493B	Bandaret	35.50	200208	2004	2008	Replace bridge
15	1384A	Fifteen Mile Creek	35.08	M72434	2005	TBD	Seismic Retrofit TBD
16	1136B	Duvall Slough	33.25	200408	2008	2009	Replace bridge deck
17	333A	Bear Creek	32.77	TBD	TBD	TBD	No improvements planned
18	5005	May Creek	32.57	200308	2006	2011	Replace bridge

Bridge Needs Report - continued

	Bridge No.	(LM) King County Landmark **Bridge Name**	**Total Rating**	**CIP #**	**Project Start**	**Const Start**	**Planned Improvements**
19	122N	Tate Creek	31.53	TBD	TBD	TBD	No improvements planned
20	3015	Patton Bridge (LM)	31.40	N/A	N/A	N/A	No improvements planned
21	240A	Cottage Lake Creek	31.02	101088	1988	TBD	Replace bridge (part of the NE 132nd St widening project)
22	186J	Fire Station	31.00	N/A	N/A	N/A	Operational study of bridge
23	3106	Soos Creek	30.70	300608	2008	2009	Replace bridge
24	1136A	Duvall Bridge	30.74	N/A	N/A	N/A	No improvements planned
25	1239A	Upper Preston	29.43	N/A	N/A	N/A	No improvements planned
26	3110	Soos Creek	29.37	N/A	N/A	N/A	No improvements planned
27	3032	Green River Gorge (LM)	29.34	M72424	2005	2008	Seismic Retrofit
28	3082	Covington Creek	28.94	400511	2011	2012	Replace bridge
29	3068	Newaukum Creek	28.77	N/A	N/A	N/A	No improvements planned
30	3038	Veazie Bridge	28.08	M72443	2003	2007	Seismic Retrofit

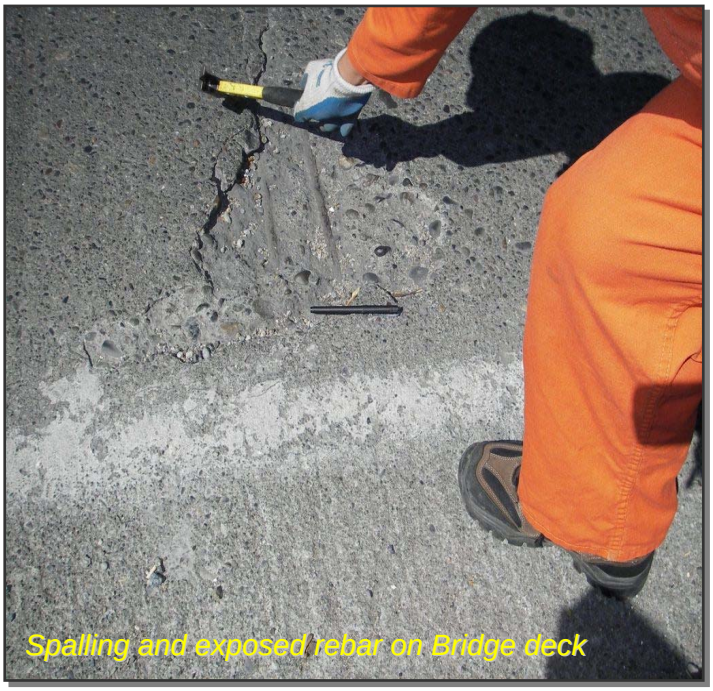
Normally, the score of each bridge changes slowly as it ages and as operational demands increase. Occasionally, a bridge deteriorates more quickly due to a specific event, such as a flood event, and consequently will receive a much higher score in the priority process, especially if the deterioration requires the bridge to have a posted load limit. If deficiencies are remedied by making major improvements to the deteriorated bridge, the priority score will decrease. As traffic volumes increase, the priority score increases because the capacity of the bridge to carry more traffic may be limited by the physical width of the road across the bridge.

Funding for the replacement or rehabilitation of a bridge occurs primarily through a federal grant program. Frequently called BRAC funding, a reference to the Bridge Replacement Advisory Committee (BRAC), federal funds are made available through this state-managed program. WSDOT issues a “Call for Bridge Projects” annually by providing the County Road Engineer with a list of bridges eligible for funding. Awards are made on a competitive basis with other local agency bridge grant applications statewide. Currently only bridges with an existing length of 20 feet or more qualify for this program. This funding restriction applies even when the replacement bridge needs to be longer than 20 feet for flood or environmental reasons. The county owns 57 short span bridges.

In 2005, WSDOT cancelled the call because statewide project cost increases created a financial shortfall across the program. The program's financial status was re-examined in 2006 and WSDOT Highways & Local Programs informed all bridge owners that the next call for Bridge Program projects is anticipated in April 2008, with selection of the projects in October 2008. The net result is a three-year gap in new federal funding for bridge projects.

VIII. FUTURE PLANS

A. Bridge Re-decks


Spalling and exposed rebar on Bridge deck

Bridge decks are comprised of various materials including bare concrete, bare timber and asphalt overlays atop concrete, timber, or steel bridge structure. Deck deterioration occurs over time as age, traffic, and severe weather takes its toll. Once a deck begins to deteriorate, its destructive pattern quickens as vehicle impact increases, leading to even more deck deterioration.

Depending on the deck driving surface material, a re-deck will take different forms. For deteriorated timber or steel, the failed portions will be removed, replaced, and refastened. For deteriorated concrete, the entire concrete deck will be either mechanically ground or hydro-blasted, and then new concrete poured on top. For deteriorated asphalt, the asphalt is mechanically ground and repaved. Future re-decking is planned in the CIP for the following bridge:


Spalling on Duvall Slough Bridge No. 1136B deck

Duvall Slough Bridge No. 1136B is a concrete bridge built in 1948 that currently features the original deck surface constructed of bare concrete. The deck is in a deteriorated state with exposed rebar with areas of rutting and spalling. Design is planned to begin in 2008 pending federal funding for this project.

B. Bridge Replacements


Mount Si Bridge No. 2550A

The **Mount Si Bridge No. 2550A** - The 92-year old Mount Si Bridge provides sole access to more than 400 homes and is located along a lifeline route. The bridge has a low sufficiency rating due to its deteriorated condition. The bridge is currently load limited, seismically vulnerable, structurally deficient, and functionally obsolete. It has low overhead clearance, narrow width, rotting timber supports, and substandard approaches and guardrails. Extensive coordination between KCDOT, KCDNRP and KCDDES has been crucial to the success of maintaining the aggressive schedule. Construction is slated to begin in April 2007 and be completed in February 2009.


Wagners Bridge No. 364B

The **Wagners Bridge No. 364B** crosses the North Fork of the Snoqualmie River and serves recreational traffic. This unique all timber bridge built in 1977 is comprised of huge log beams. It is currently load limited due to extensive rot in the untreated log beams and river scour under one of the piers. Construction of the new bridge is expected in 2007. The new bridge will be constructed with concrete girders and concrete deck; it will measure 176 feet long by 21 feet wide

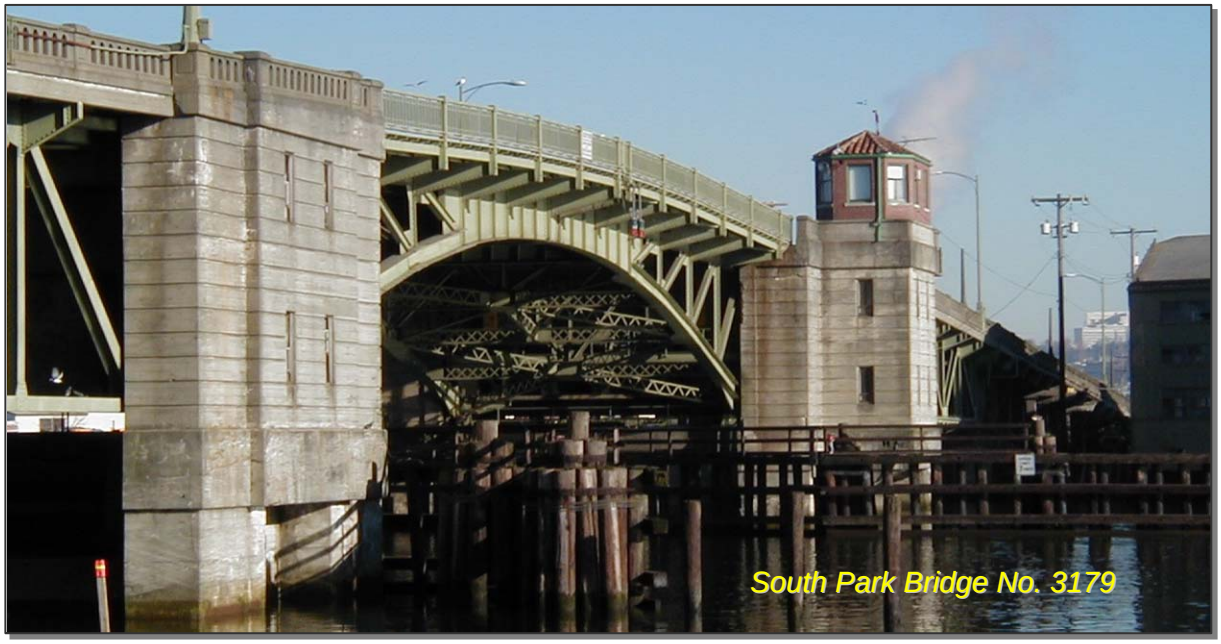
The **Short Span Bridge Replacement Program** began in 2005 to address the need to replace over 50 bridges with spans less than 20 feet. Using a programmatic approach, all short-span bridges have been evaluated and ranked using the King County Priority Process. Those bridges with the lowest ranking have been bundled into groups and scheduled for replacement, rather than repair or rehabilitation.


Rutherford Slough Bridge No. 920A

The **C.W. Neal Bridge No. 249A** and **Rutherford Slough Bridge No. 920A** will be the first group of short span bridges replaced under the program. The pair of bridges is located in the Fall City area and construction is planned for 2007.

The **South Park Bridge No. 3179** is a Scherzer Rolling Lift double-leaf bascule bridge that spans the Duwamish River near Boeing Field in South Seattle area. Built in 1929-31, it is the county's longest bridge, spanning one-quarter mile from end-to-end. It is the only moveable (opening) bridge owned by King County. The bridge is part of an important regional arterial that carries an average of 20,000 cars/trucks per day.

Between 1989 and 2002, King County jointly owned the bridge with the City of Tukwila (the city/county boundary is down the middle of the river), and all operation and maintenance costs were split evenly between the two agencies. An Interlocal Agreement between King County and the City of Tukwila was signed in January 2003. Under this agreement, the county assumed the full cost of operations and maintenance


South Park Bridge No. 3179

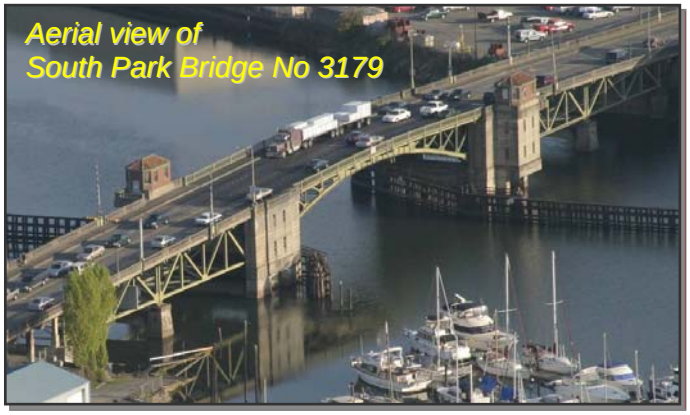
of the South Park Bridge, while Tukwila still owns one half of the bridge. The county received $3 million from the City of Tukwila for maintenance or for rehabilitation/replacement costs of the bridge.

Since 1995, bridge maintenance efforts have increased to combat the deterioration and improve the reliability of the electrical and mechanical systems of the moveable spans. However, the concrete on the bridge continues to deteriorate, the electrical operating system is problematic, and bascule pier movement problems continue due to insufficient foundation capacity. In 2001, the Nisqually earthquake shifted the main piers, necessitating major repairs to the steel spans to restore the moveable operation of the bridge. Since then, repairs to the moveable spans have been necessary on a yearly basis to correct for pier movement and maintain reliable bridge operation. In addition, many larger-scale improvements to the bridge have been deferred in the past several years until the current Environmental Impact Statement (EIS) study is completed.

Inspection on South Park Bridge No 3179

The EIS has been in development since 2002 and five alternatives studying replacement, rehabilitation, or removal of the bridge have been investigated. A replacement bascule (drawbridge) was selected as the preferred alternative based on overwhelming public and agency support through numerous comments received after review of the Draft EIS. The EIS effort continues, with preliminary engineering of the bascule bridge and a biological assessment of the project occurring in 2006/2007 with completion of the Final EIS expected in 2008.

Following the EIS effort, a two-year design and right-of-way acquisition phase, followed by a three-year construction phase (mid 2010 – mid 2013) will commence, provided adequate funding is secured. The estimated total project cost of the new bascule bridge is $150 million in 2010 dollars. The bulk of the funding, $110 million is allocated by a regional transportation package that will go to public vote in November 2007. A grant from the Bridge Replacement Advisory Committee (BRAC) could yield approximately $20 million.



Aerial view of South Park Bridge No 3179

In addition, King County has reserved $10 million and $5 million has been granted by the Puget Sound Regional Council. The City of Seattle is also expected to contribute to the project but no commitment has been made to date. If full funding is not secured, the bridge may need to be closed by the end of this decade.

GLOSSARY OF BRIDGE TERMINOLOGY

Abutment–a substructure supporting the end of a single span, or the extreme end of a multispan superstructure and, in general, retaining or supporting the approach fill.

Backwall–the top-most portion of an abutment functioning primarily as a retaining wall to contain approach roadway fill.

Bent–a supporting unit of the beams of a span made up of one or more column or column-like members connected at their top-most ends by a cap, strut, or other horizontal member.

Bracing–a system of tension or compression members, or a combination of these, connected to the parts to be supported or strengthened by a truss or frame. It transfers wind, dynamic, impact, and vibratory stresses to the substructure and gives rigidity throughout the complete assemblage. Can also refer to diagonal members that tie two or more columns of a bent together.

Cap–the horizontally-oriented, top-most piece or member of a bent serving to distribute the beam loads upon the columns and to hold the beams in their proper relative positions.

Chord–in a truss, the upper-most and the lower-most longitudinal members, extending the full length of the truss.

Compression–a type of stress involving pressing together; tends to shorten a member; opposite of tension.

Deck–portion of a bridge that provides direct support for vehicular and pedestrian traffic.

Elastomeric pads–rectangular pads made of neoprene, found between the sub- and superstructure that bears the entire weight of the superstructure. Elastomeric pads can deform to allow for thermal movements of the superstructure.

Endwall–the wall located directly under each end of a bridge that holds back approach roadway fill. The endwall is part of the abutment.

Fracture critical member–a member in tension or with a tension element whose failure would probably cause a portion of or the entire bridge to collapse.

Pier–a structure comprised of stone, concrete, brick, steel, or wood that supports the ends of the spans of a multispan superstructure at an intermediate location between abutments. A pier is usually a solid structure as opposed to a bent, which is usually made up of columns.

Pile–a rod or shaft-like linear member of timber, steel, concrete, or composite materials driven into the earth to carry structure loads into the soil.

Pinpile–a series of two-inch-diameter pipes driven in a line into the ground to support the timber planks of a small retaining wall, typically used to prevent erosion under a bridge abutment.

Post or column–a member resisting compressive stresses, in a vertical or near vertical position.

Scour–erosive action of removing streambed material around bridge substructure due to water flow. Scour is of particular concern during high-water events.

Short span bridge–one of 57 bridges in the short span bridge program. The characteristics of these bridges are a span less than 20 feet and typically supported by timber piles or shallow concrete footings.

Soffit–the underside of the bridge deck or sidewalk.

Spall–a concrete deficiency wherein a portion of the concrete surface is popped off from the main structure due to the expansive forces of corroding steel rebar underneath. This is especially common on older concrete bridges.

Stringer–a longitudinal beam (less than 30' long) supporting the bridge deck, and in large bridges, framed into or upon the floor beams.

Sufficiency rating–the sufficiency rating is a numeric value from 100 (a bridge in new condition) to 0 (a bridge incapable of carrying traffic). The sufficiency rating is the summation of four calculated values: Structural Adequacy and Safety, Serviceability and Functional Obsolescence, Essentiality for Public Use, and Special Reductions.

Substructure–the abutment, piers, grillage, or other structure built to support the span or spans of a bridge superstructure. Includes abutments, piers, bents, and bearings.

Superstructure–the entire portion of a bridge structure which primarily receives and supports traffic loads and in turn transfers the reactions to the bridge substructure; usually consists of the deck and beams or, in the case of a truss bridge, the entire truss.

Tension–type of stress involving an action which pulls apart.

Trestle–a bridge structure consisting of beam spans supported upon bents. Trestles are usually made of timber and have numerous diagonal braces, both within each bent and from bent to bent.

Wheelrail–a timber curb fastened directly to the deck, most commonly found on all-timber bridges.

Wingwall–walls that slant outward from the corners of the overall bridge that support roadway fill of the approach.

APPENDIX TO THE 2006 ANNUAL BRIDGE REPORT

Table One–Bridge Inventory

Table Two–Inventoried Bridges Owned by Cities

TABLE ONE - BRIDGE INVENTORY

	Bridge Number	County Bridge Name	County Council District	Thomas Guide Page	Width	Length	Year Built	Year Rebuilt	Facilities Carried	Location	Feature Bridge Crosses	Jurisdiction
1	1-C/S	212th St Green River	5	685	56	189	1966		S 212th	0.7 Mi W of SR 181	Green River	Kent
2	10	Leary Way	3	537	48	114	1992		Leary Way	0.4 Mi S of Jct SR 908	Sammamish River	Redmond
3	20	NE 85th	3	537	56	178	1985		NE 85th Street	0.5 Mi W of Jct SR 202	Sammamish River	Redmond
4	30	Sixty-01 UX	3	536	44	36	1970		Old Redmond Rd	0.2 Mi W of 140th Ave	Access road	Redmond
5	45	Union Hill	3	537	61.5	114	1994		Union Hill Road	0.1 Mi W of Avondale Rd	Bear Creek	Redmond
6	50	Bear Creek	3	537	63	52	1979	1988	Avondale Road	0.4 Mi N of Jct 520/202	Bear Creek	Redmond
7	52B	Cottage Lake Ck	3	507	22.8	20	1951		NE 165th St	0.5 Mi W of Avondale	Cottage Lk Ck	
8	52C	Bear Creek	3	507	66	123	1995		Avondale Road	3 Mi N of Redmond	Bear Creek	
9	52D	Bear Creek	3	507	26	45	1950		Avondale Pl NE	0.3 Mi N of NE 116th St	Bear Creek	
10	52E	Bear Creek	3	507	66	67	1995		Avondale Road	0.5 Mi N of NE 116th St	Bear Creek	
11	52F	Cottage Lake Ck	3	507	40	21	1987		NE 159th St	0.1 Mi W of Avondale Rd	Cottage Lake Creek	
12	52H	Cottage Lake Ck	3	507	66	48	1994		Avondale Road NE	315 ft S of NE 132nd	Cottage Lake Creek	
13	55	Bear Ck Ranchette	3	507	6	52	1971	2003	Foot bridge	0.6 Mi N of Redmond	Cottage Lake Creek	
14	61B	Fish Hatchery	3	600	22.8	20	1950		SE Fish Hatchery Rd	0.8 Mi SW of SR 202	Drainage ditch	
15	61G	Tokul Ck Park	3	600	22	85	1950		Fish Hatchery Rd	0.8 Mi S of SR 202	Tokul Creek	
16	63	Welcome Lake	3	508	28.7	32	1984		218th Ave NE	1 Mi E of Avondale	Colin Creek	
17	70	148th Ave	3	537	51	505	1991		148th Ave SE	0.1 Mi N of Jct SR 908	Hillside	Redmond
18	72A	May Creek	9	627	22.8	16	1951		148th Ave SE	0.8 Mi N of SR 900	May Creek	
19	83B	Issaquah Creek	9	658	22.8	40	1952		SE 156th St	04.8 Mi S of Issaquah	Issaquah Creek	
20	83D	Issaquah Creek	9	658	26	42	1962		Cedar Grove Rd	0.5 Mi N of SE 156th	Issaquah Creek	
21	90	NE 90th Street	3	537	57	220	2001		NE 90th Street	0.4 Mi W of SR 202	Sammamish River	Redmond
22	99L	Kimball Ck	3	630	10	45	1960	1973	SE 76th St	0.5 Mi W of SR 202	Kimball Creek	
23	119A	Novelty Hill	3	537	35	32	1974		Novelty Hill Rd	0.25 Mi NE of Avondale	Bear Creek	Redmond
24	122I	North Fork	3	630	22	252	1951		428th Ave SE	0.1 Mi S of SE Reinig	N Fk Snoqualmie R	
25	122K	Norman	3	630	30	390	1984		428th Ave SE	0.6 Mi S of S Reinig	Middle Fk. Snoqualmie R	
26	122N	Tate Creek	3	630	22.8	16	1952		SE 73rd St	North Fork Road SE	Tate Creek	
27	124B	124th St	3	506	65	22	1966	1999	NE 124th St	0.8 Mi E of 132nd Pl	Drainage ditch	
28	124C	NE 124 St	3	507	62	128	2004		NE 124th St	0.5 Mi W of Wood-Red Rd	Sammamish River	
29	167AOX	Richmond Beach OX	1	474	24	103	1923	1956	27th Ave NW	0.5 Mi W of 20th Ave NE	BN RR	Shoreline

	Bridge Number	County Bridge Name	County Council District	Thomas Guide Page	Width	Length	Year Built	Year Rebuilt	Facilities Carried	Location	Feature Bridge Crosses	Jurisdiction
30	167C	Hidden Lake	1	474	20	312	1931		10th Avenue NW	NW Innis Arden Way	Side hill ravine	Shoreline
31	180A	Evans Creek	3	537	20	23	1917	1953	NE 150th St	0.1 Mi SW of SR 202	Evans Creek	
32	180L	Patterson Creek	3	598	22.8	16	1951		SE 28th St	0.2 Mi S of SR 202	Patterson Creek	
33	186J	Fire Station	3	629	26	16	1915		Preston Fall City	0.5 Mi SE of I-90	Unimproved UX	
34	225C	York	3	507	46	220	2006		NE 116th St	0.5 Mi W of SR 202	Sammamish River	1/2 Redmond
35	228A	W Snoqualmie Rd	3	569	26	36	1965		NE 18th St	W Snoq. River Rd NE	Drainage ditch	
36	228D	W Snoqualmie Rd	3	569	22.8	16	1950		Snoqualmie River Rd	2 Mi S of Tolt Hill Rd	Drainage ditch	
37	228E	Patterson Creek	3	599	26	50	1969		Snoqualmie River Rd	0.4 Mi N of SE 24th	Patterson Creek	
38	228F	312 Ave SE	3	599	22.8	20	1924	1950	Snoqualmie River Rd	0.25 Mi N of SE 24th	Drainage ditch	
39	234A	Raging River	3	599	40	200	1998		Preston-Fall City	0.25 Mi S of SR 202	Raging River	
40	240A	Cottage Lake Ck	3	507	22.8	18	1951		Bear Creek Road	0.1 Mi E of Avondale Rd	Cottage Lake Creek	
41	249A	C.W. Neal Road	3	599	22.8	16	1951		C.W. Neal Road	Fall City-Carn. Rd	Drainage ditch	
42	249B	C.W. Neal Road	3	599	22.8	16	1951		C.W. Neal Road	1.5 Mi S of SR 203	Drainage ditch	
43	249C	C.W. Neal Road	3	599	22.8	20	1951		C.W. Neal Road	0.3 Mi S of SR 203	Drainage ditch	
44	257Z	Horseshoe Lk Ck	3	539	16.8	18	1930	1969	310th Ave NE	0.2 Mi N of Carn. Farm	Horseshoe Lake Creek	
45	264X	Swamp Creek	1	476	40	45	1950	2005	73rd Ave NE	Inters. NE 192nd St	Swamp Creek	Kenmore
46	264Z1	McAleer Creek	1	475	24	24	1949		Shore Drive NE	0.2 Mi SE of SR 522	McAleer Creek	Lk Forest Pk
47	264Z2	McAleer Creek	1	475	24	24	1949		45th Ave NE	0.2 Mi SE of Bothell Way	McAleer Creek	Lk Forest Pk
48	264Z3	McAleer Creek	1	475	24	24	1949		Beach Drive NE	0.1 Mi SE of Bothell Way	McAleer Creek	Lk Forest Pk
49	267X	Cherry Valley Trestle	3	630	24	181	1951		315th Way NE	0.5 Mi N of Cherry Rd	Cherry Creek	
50	271AOX	Tokul Creek OX	3	600	38	100	1988		Tokul Road	0.7 Mi NE of SR 202	Old Milwaukee RR bed	
51	271B	Upper Tokul Ck	3	688	22.5	107	1965		Tokul Road	1.5 Mi NE of SR 202	Tokul Creek	
52	3202	Maxwell Road	9	687	22.8	16	1952		225th Ave SE	0.6 Mi N of SR 169	Cattle UX	
53	333A	Bear Creek	3	507	22.8	20	1950		NE 133rd St	0.25 Mi E of Bear Ck	Bear Creek	
54	344A	Patterson Creek	3	599	22.8	20	1951		310th Ave SE	0.8 Mi NE of SR 202	Patterson Creek	
55	344B	308th Ave SE	3	599	22.8	16	1950		308th Ave SE	0.2 Mi N of SR 202	Patterson Creek	
56	359A	Granite Creek	3	173	14	30	1967		Private road	6 Mi E of North Bend	Granite Creek	
57	359B	Lake Dorothy	3	173	26	339	1963		SE Lake Dorothy Rd	5.1 Mi E of 468th Ave	Middle Fork Snoqualmie R	
58	359C	Lk Dorothy Overflow	3	173	29	20	1963		SE Lake Dorothy Rd	6 Mi E of North Bend	Overflow	
59	359D	Lk Dorothy Overflow	3	173	14	38	1962		SE Lake Dorothy Rd	9 Mi E of North Bend	Overflow	
60	364A	Deep Creek	3	163	18	109	1965		North Fork Rd SE	13.7 Mi N of North Bend	Deep Creek	

	Bridge Number	County Bridge Name	County Council District	Thomas Guide Page	Width	Length	Year Built	Year Rebuilt	Facilities Carried	Location	Feature Bridge Crosses	Jurisdiction
61	364B	Wagners	3	163	10	203	1977		North Fork Rd SE	13.5 Mi N of North Bend	N Fork Snoqualmie River	
62	364C	Sunday Creek	3	163	14	80	1962	1977	North Fork Rd SE	17.4 Mi N of North Bend	N Fork Snoqualmie River	
63	368B	May Creek Trestle	9	626	24	204	1951		Coal Ck Pkwy SE	0.25 Mi N of SE 95th Wy	May Creek	Newcastle
64	404B	Novelty	3	508	39.4	623	2000		NE 124th St	0.5 Mi W of SR 203	Snoqualmie River	
65	422A	Beaver Lk Trestle	3	598	40	389	1968	1994	SE 24th St	0.6 Mi E of 228 Ave SE	Slough	Sammamish
66	480A	Bear Creek	3	507	22.8	18	1951		NE 116th St	0.1 Mi E of Avondale	Bear Creek	
67	493B	Bandaret	9	658	24.5	60	1952	1965	SE May Valley Rd	0.4 Mi W of Issaq-Hobart	Issaquah Creek	
68	493C	Fifteen Mile Creek	9	658	26.9	38	1932	1973	SE May Valley Rd	0.2 Mi W of Issaq-Hobart	Fifteen Mile Creek	
69	506A	Money Creek	3	164	14	220	1958		NE Money Creek Rd	2 Mi S of SR 2	Money Creek	
70	509A	Baring	3	483	8.3	340	1930	1952	NE Index Creek Rd	0.1 Mi S of SR 2	Skykomish River-S Fork	
71	1-C/S	213th St Green River	5	685	56	189	1966		S 212th	0.7 Mi W of SR 181	Green River	Kent
72	10	Leary Way	3	537	48	114	1992		Leary Way	0.4 Mi S of Jct SR 908	Sammamish River	Redmond
73	20	NE 85th	3	537	56	178	1985		NE 85th Street	0.5 Mi W of Jct SR 203	Sammamish River	Redmond
74	30	Sixty-01 UX	3	536	44	36	1970		Old Redmond Rd	0.2 Mi W of 140th Ave	Access road	Redmond
75	682A	Preston	3	629	28	242.8	2003		Lovegren Rd	0.1 Mi E of Prest-Fall	Raging River	
76	891A	Kimball Super Span	3	630	32	25	1971		384th Ave SE	0.4 Mi N of SE N. Bend Wy	Kimball Creek	
77	896A	Rock Creek	9	689	17	61	1994		SE 208th St	4.2 Mi E of Issaq-Hobart	Rock Creek	
78	896B	Kerristan	9	689	14	22	1996		208th Ave SE	6.8 Mi E of Issaq-Hobart	Raging River	
79	896C	Kerristan	9	689	14	32	1996		208th Ave SE	6.8 Mi E of Issaq-Hobart	Raging River	
80	901	Redmond Rdg Upd	3	537	32.4	196	2001		Redmond Rdg Dr NE	300 ft NW of NE 80th St	Wetland	
81	909B	Clough Creek	3	660	22.8	16	1951		SE 141st St	1.6 Mi S of I-90	Clough Creek	
82	916A	W Snoq River Rd	3	569	22.8	20	1951		W Snoq River Rd	0.8 Mi S of NE Tolt Rd	Slough	
83	920A	Rutherford Slough	3	599	22.8	20	1950		SE 39th Place	0.4 Mi NE of SR 203	Rutherford Slough	
84	927B	Patterson Creek	3	599	12.8	21	1951	1973	300th Ave SE	0.1 Mi S of SR 202	Patterson Creek	
85	952A	Evans Creek	3	537	22	23	1913		NE Union Hill Rd	1.3 Mi E of Avondale Rd	Evans Creek	
86	952B	Evans Creek	3	537	22	32	1913		196th Ave NE	0.9 Mi N of SR 202	Evans Creek	
87	952C	East Redmond	3	537	22	23	1913		196th Ave NE	0.5 Mi N of SR 202	Evans Creek	
88	999K2	Scenic	3	164	19	61	1960		County Road	0.1 Mi S of SR 2	Tye River	
89	999W	Miller River	3	514	16.8	228	1922		Cascade Stevens SR	1.5 Mi SE of SR 2	Miller River Slough	
90	999X	Cascade Hwy	3	514	22.8	20	1950		Cascade Scenic Hwy	1.3 Mi SE of SR 2	Miller River Slough	
91	999Z	Skykomish River	3	514	24	255	1957		Money Creek Rd	0.1 Mi SE of SR 2	Skykomish River	

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92	1000	Tye River Ped	3	164	6	80	1996		Old Cascade Hwy	0.4 Mi N of SR 2	Tye River	
93	1008E	Raging River	3	629	24	70	1915		SE 68th St	0.1 Mi E of Fall City Rd	Raging River	
94	1008G	Raging River	3	629	28	169	1962		Preston Fall City	2 Mi NE of I-90	Raging River	
95	1011A3	Inglewood	3	567	34	63	1961		East Lake Sammamish	0.5 Mi N of Inglewood Rd	Drainage ditch	Sammamish
96	1014B	Overlake Dr	6	566	23	61	1946	1968	Overlake Dr	0.6 Mi E of Jct 84th Ave	Seasonal drainage	Medina
97	1014C	Overlake Dr	6	566	23	61	1946	1968	Overlake Dr	0.5 Mi E of Jct 84th Ave	Seasonal streamlet	Medina
98	1023A	Stossel	3	539	24	330	1951		NE Carnation Farm	0.8 Mi W of SR 203	Snoqualmie River	
99	1052A	Sylvester Rd	8	654	27	207	1931		Sylvester Road SW	0.7 Mi SW of 160th	Tributary of Miller Ck	Normandy Pk
100	1056B	Bear Creek	3	477	37	20	1915		Woodinville-Duvall	1.3 Mi E of Avondale	Bear Creek	
101	1071AE	East Kenmore	1	475	25.8	590	1970		Juanita Drive	0.2 Mi S of Bothell Way	Sammamish River	Kenmore
102	1071AW	West Kenmore	1	475	25.8	590	1938		Juanita Drive	0.2 Mi S of Bothell Way	Sammamish River	Kenmore
103	1086A	Kimball Creek	3	630	25	43	1929	1965	SE 80th St	0.4 Mi W of SR 202	Kimball Creek	
104	1086B	Coal Creek	3	630	22.8	16	1950		378th Ave SE	0.2 Mi S of SE 80th St	Coal Creek	
105	1105	Tuck Creek Temp	3	508	11.5	30	1999		W Snoq Valley Rd	1 Mi W of SR 203	Tuck Creek	
106	1111-1	Miller Cr. Rd.	8	654	30	15	1960		13th Ave SW	0.3 Mi S of Sylvester Rd	Miller Creek	Normandy Pk
107	1116A	Brissack Bridge	3	660	26	266	1971		436th Ave SE	0.8 Mi S of I-90	S Fk Snoqualmie	
108	1135-1	North Bend #1	3	630	23.3	20	1951		Boalch Ave	0.2 Mi N of US Rt 2	Drainage ditch	North Bend
109	1135-2	North Bend #2	3	630	17.2	76	1970		NW 8th Street	0.2 Mi W of SR 202	Overflow channel	North Bend
110	1135-3	North Bend #3	3	660	51.5	467	1941		W North Bend Way	3.2 Mi E of I-90	S Fork Snoqualmie R.	North Bend
111	1135-4	North Bend #4	3	660	52	164	1941		W North Bend Way	3.5 Mi E of Jct I-90	Overflow channel	North Bend
112	1135-5	North Bend #5	3	660	47	22	1989		SW Mt Si Blvd	0.1 Mi E of SR 202	Ribary Creek	North Bend
113	1135-6	North Bend #6	3	630	23	16	1951		Alm Way	0.3 Mi N of NW 8 St	Slough	North Bend
114	1135-7	North Bend #7	3	630	52	56	1941		W North Bend Way	0.9 Mi. W of SR 202	Slough	North Bend
116	1136B	Duvall Slough	3	508	24	639	1948		Woodinville-Duvall	0.4 Mi W of SR 203	Duvall Slough	
117	1136C	Woodinville-Duvall	3	508	24	90	1948		Woodinville-Duvall	0.6 Mi W of SR 203	Duvall Slough	
118	1136D	Woodinville-Duvall	3	508	24	70	1948		Woodinville-Duvall	0.8 Mi W of SR 203	Duvall Slough	
119	1136E	Woodinvill-Duvall	3	508	24	50	1948		Woodinville-Duvall	0.9 Mi W of SR 203	Duvall Slough	
115	1136A	Duvall	3	508	24	1182	1951		Woodinville-Duvall	0.1 Mi W of SR 203	Snoqualmie River	1/2 Duvall
120	1239A	Upper Preston	3	629	22.8	60	1950		Upper Preston Rd	1.8 Mi SE of I-90	Echo Lake Creek	
121	1320A	Ames Lake Trestle	3	538	25	152	1924	2003	Ames Lk Carnation	0.2 Mi S of W Snoq. Rd	Ames Lake Creek	
122	1384A	Fifteen Mile Creek	9	658	24	64	1949		Issaquah Hobart Rd	0.3 Mi S of May Valley SE	Fifteen Mile Creek	

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123	1384B	Fifteen Mile Creek	9	658	18.5	30	1969		240th Ave SE	0.2 Mi N of Tiger Mt Rd	Fifteen Mile Creek	
124	1413B	S Fk Kimball Ck	3	630	23.2	16	1954		Meadowbrook Rd	0.3 Mi South of SR 202	Kimball Creek	Snoqualmie
125	1413C	E Fk Kimball Ck	3	630	23.2	16	1954		Meadowbrook Rd	0.1 Mi S of SR 202	Kimball Creek	Snoqualmie
126	1726A	Meadowbrook	3	630	17	386	1921	2005	Meadowbrook Way SE	0.7 Mi NE of SR 202	Snoqualmie River	1/2 Snoq
127	1730A	Bear Creek	3	537	23	20	1951	1997	NE 95th Street	0.3 Mi E of Avondale Rd	Bear Creek	Redmond
128	1741A	Issaquah Ck	9	658	22.8	54	1951	1974	252 Ave SE Issaq.	0.1 Mi S of Hobart Road	Issaquah Creek	
129	1814	Mill Creek Concrete Slab	7	715	39	60	1954		SR 181	3.8 Mi N of Jct SR 18	Mill Creek	Kent
130	1815	Mill Creek Arch	7	715	28	35	1915		SR 181	4.6 Mi N of Jct SR 18	Mill Creek	Kent
131	1817	Green River Box Girder	7	715	40	275	1968		SR 181	5.2 Mi N Jct SR 18	Green River	Kent
132	1834A	Tolt	3	569	19.3	696	1922	1968	NE 32 St-Carnation	0.5 Mi W of SR 203	Snoqualmie River	
133	2133A	Sikes Lake Trestle	3	538	21.9	260	1978		284 Ave NE - Tolt	0.1 Mi N of Ames Lake Rd	Over Sikes Lake	
134	2158-1	Tolt Pipeline	3	599	12	200	1999		Trail	0.5 Mi E of SR 202	155th Ave NE	KC Park
135	2178-29	Snoq Valley @ NE 32nd	3	569	8.8	96	1922		Trail	0.5 Mi E of SR 203	NE 32nd St	KC Park
136	2266-11	Cedar River Trail-11	9	718	12	80	2003		Cedar River Trail	Over SE 248th Street	SE 248th St	KC Park
137	2266-2	Cedar River Trail-02	9	687	11.8	77	1908		Cedar River Trail	SE 208 & SR 169	SE 208th St	KC Park
138	2266-3	Cedar River Trail-03	9	688	11.8	77	1908		Cedar River Trail	SE 213 & SR 169	SE 213th St	KC Park
139	2266-5	Cedar River Trail-05	9	687	11.8	96	1935		Cedar River Trail	0.1 Mi S of SR 169	Witte Rd SE	KC Park
140	2266-7	Cedar River Trail-07	9	687	11.8	37	1925		Cedar River Trail	0.5 Mi S of SR 169	Witte Rd SE	KC Park
141	2266-8	Cedar River Trail-08	9	688	11.8	268	1912		Cedar River Trail	SE 232 & Lwr Dorre Don	SE 232nd St	KC Park
142	2266-9	Cedar River Trail-09	9	718	11.8	62	1920		Cedar River Trail	0.1 Mi S of 232nd St	Upper Dorre Don Way SE	KC Park
143	2550A	Mt. Si Bridge	3	660	19	290	1914	1960	Mount Si Road	0.4 Mi N of SE North Bend	Middle Fk Snoqualmie	
144	2605A	Foss River	3	164	14	120	1951		Foss River Road	0.8 Mi SE of SR 2	Foss River	
145	3005	Hylebos Creek	7	774	22.8	16	1951		S 373rd St	0.2 Mi E of Pacific Hwy	Hylebos Creek	Federal Way
146	3013	Lee Hill	7	746	48	219	1973		8th Street NE	0.4 Mi E of Harvey Rd	Green River	1/2 Auburn
147	3014	Neely Bridge	7	746	28	240	1970		Auburn-Black Diamond	0.2 Mi NE of SR 18	Green River	
148	3015	Patton Bridge	7	776	24	430	1950		SE Green Valley Rd	1.5 Mi SE of SR 18	Green River	
149	3017	Circle Water	7	777	26	45	1926	1965	SE Green Valley Rd	4.1 Mi E of SR 18	Green River tributary	
150	3020	Green Valley Road	7	777	22.8	20	1950		SE Green Valley Rd	5.5 Mi E of SR 18	Drainage ditch	
151	3022	Green Valley Road	7	777	22.8	20	1954		SE Green Valley Rd	6.7 Mi E of SR 18	Drainage ditch	
152	3024	Flaming Geyser	9	777	34.5	362	1991		228 Place SE	0.2 Mi E of Green Vly Rd	Green River	
153	3025	Whitney	7	777	38	250	1990		Whitney Road	0.1 Mi S of Green Vly Rd	Green River	

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154	3027	Whitney Hill	9	777	37	63	2000		218th Ave SE	0.8 Mi S of Green Vly Rd	Newaukum Creek	
155	3030	SE 380 St	9	778	22.8	16	1950		SE 308th St	1 Mi W of SR 169	Slough	
156	3032	Green River Gorge	9	748	14	437	1914	1991	Franklin Road	4 Mi E of SR 169	Green River	
157	3035A	Coal Creek	9	779	17.8	49	1958		Lake Walker Rd	1.5 Mi SE of Veazie-Cumb	Cool Creek	
158	3036	Kanaskat Arch	9	749	24	220	1918	1955	Cumberland-Kanaskat	0.1 Mi S of Kanaskat	Green River	
159	3037OX	Kanaskat OX	9	749	22.5	157	1959		Cumberland-Kanasket	At Kanasket Kangley	Northern Pacific RR	
160	3038	Veazie	9	778	26	56	1950		Veazie-Cumberland	0.3 Mi N of SE 392 St	Coal Creek	
161	3040A	Newaukum Creek	9	808	26.8	20	1959		284th Ave SE	0.3 Mi N of SE 416th	Newaukum Creek	
162	3041	Newaukum Creek	9	808	27.7	70	1958		SE 416th St	0.9 Mi E of SR 169	Newaukum Creek	
163	3042	Newaukum Creek	9	808	28	16	1926	1969	SE 416th St	0.8 Mi E of SR 169	Newaukum Creek	
164	3043	Newaukum Creek	9	808	28	16	1925	1969	SE 416th St	0.6 Mi E of SR 169	Newaukum Creek	
165	3049	284 Ave SE	9	838	22.8	20	1950		284th Ave SE	0.5 Mi S of SE 456th St	Boise Creek	
166	3050A	Greenwater River	9	841	19	19	1964	1996	SE 496th Pl	0.3 Mi NE of SR 410	Packard Creek	
167	3050B	Greenwater	9	841	11	110	1973		Two County Road	0.2 Mi NE of SR 410	Greenwater River	
168	3051	Boise Creek	9	838	18	16	1927		276th Ave SE	0.3 Mi S of Warner Ave	Boise Creek	
169	3052	Boise Creek	9	838	24	19	1927	1959	268th Ave SE	0.2 Mi S of Warner Ave	Boise Creek	
170	3055A	Boise X Connection	9	838	21	37	1956		244th Ave SE	2 Mi S of Enumclaw	Boise Creek	
171	3056A	SE 408th St	7	807	28	16	1927		SE 408th St	0.2 Mi E of SR 164	Drainage ditch	
172	3060	208th Ave SE	9	807	26.8	16	1951		208th Ave SE	Inters. SE 448th St	Drainage ditch	
173	3063	Newaukum Creek	9	808	22.8	40	1950		SE 416th St	0.6 Mi W of SE 416th St	Newaukum Creek	
174	3064	Newaukum Creek	9	808	26.5	47	1928	1997	SE 424th St	0.8 Mi W of 244th SE	Newaukum Creek	
175	3066	Newaukum Creek	9	808	28	49	1927	1955	236th Ave SE	0.5 Mi N of SR 164	Newaukum Creek	
176	3068	Newaukum Creek	9	808	21.6	32	1928		244th Ave SE	0.2 Mi N of SE 436th	Newaukum Creek	
177	3069	Newaukum Creek	9	808	26	24	1939	1956	248th Ave SE	Inters. SE 433rd St	Newaukum Creek	
178	3071	Newaukum Creek	9	808	24	40	1950		SE 424th St	0.5 Mi W of SR 169	Newaukum Creek	
179	3075	Landsburg	9	718	38	130	1982		Landsburg Road	1.5 Mi N of Kent Kangley	Cedar River	
180	3082	Covington Creek	9	747	24	19	1915		Auburn-Black Diamond	0.3 Mi N of SE Lk. Holm	Covington Creek	
181	3084	Covington Creek	9	747	24	20	1915		Auburn-Black Diamond	Inters. SE 322nd St	Covington Creek	
182	3085	Covington	9	717	24	45	1929		Covington-Sawyer R	0.7 Mi SE of SR 516	Jenkins Creek	
183	3085P	Covington Wy Ped	9	717	8	65	1998		Pedestrian pathway	350 ft SE of Wax Road	Jenkins Creek	
184	3086OX	Berrydale Ox	7	747	24	105	1931	1968	Kent-Black Diamond	At SE 29th St	Burlington Northern RR	

	Bridge Number	County Bridge Name	County Council District	Thomas Guide Page	Width	Length	Year Built	Year Rebuilt	Facilities Carried	Location	Feature Bridge Crosses	Jurisdiction
185	3087	Big Soos Creek	7	747	24	36	1931		Kent-Black Diamond	At SE 288th St	Big Soos Creek	
186	3092	Lake Wilderness OX	9	717	38	24	1996		Witte Rd	0.5 Mi S of SR 169	Trail	Maple Valley
187	3094OX	Gravel Pit Ox	9	717	19	79	1988		SE 231st St	1 Mi E of SR 169	Trail	Maple Valley
188	3096OX	Maple Valley OX	9	688	42	24	1994		SE 216th Way	0.5 Mi E of SR 169	King County Park Trail	
189	3097	Dorre Don Way	9	688	22.8	20	1945	1959	Dorre Don Way	1 Mi SE of SR 169	Drainage ditch	
190	3098OX	Maple Valley SE 263rd	9	718	28	18	2004		SE 263rd Street	W of SR 169 & SE 264th St	Maple Valley Trail	Maple Valley
191	3099	Maxwell Road	9	687	22.8	20	1939	1951	225th Ave SE	0.5 Mi NE of SR 169	Gem Creek	
192	3099A	Gem Creek	9	687	25	22	1989		SE 206th Street	0.5 Mi E of SR 169	Gem Creek	
193	3104	Soos Creek	9	716	23	30	1927	1951	SE 256TH ST	At 148th Ave SE	Soos Creek	Kent
194	3105	Soos Creek	9	716	33	25	1971		148TH AVE SE	At SE 255TH ST	Soos Creek	Kent
195	3106	Soos Creek	9	716	20.3	17	1938		SE 244th St	0.1 Mi W of 148th Ave	Soos Creek	
196	3108	Soos Creek	9	716	33	25	1971		148th Ave SE	0.2 Mi N of SE 240th	Soos Creek	
197	3109	Soos Creek	9	686	22.8	16	1949		SE 224th St	0.3 Mi E of 132nd Ave	Soos Creek	
198	3109A	Soos Creek	9	686	18.6	15	1959		SE 216th St	0.3 Mi E of 132nd Ave SE	Soos Creek	
199	3109B	Lk. Youngs' Way	9	686	38.8	16	1969		SE Lk Youngs Way	0.3 Mi NE of SE 208th	Soos Creek	
200	3110	Soos Creek	9	686	20	15	1928		SE 208th St	0.3 Mi E of SE 204th	Soos Creek	
201	3126	SE 277th St	7	715	62.8	16	1950	1973	SE 277th St	1.5 Mi E of I-5	Slough	
202	3130	Alvord "T"	7	715	18	275	1914	1970	S 3rd Ave Kent	0.3 Mi E of SR 167	Green River	
203	3139	Saltwater St Park	5	715	24	570	1934		Marine View Dr.	2.6 Mi NW of SR 99	Saltwater State Park	Des Moines
204	3142	North Twin	5	715	24	212	1951		16th Ave S	0.1 Mi S of S 250th St	McSorley Creek	Des Moines
205	3143	South Twin	5	715	24	375	1951	1996	16th Ave S	0.1 Mi S of S 250th St	McSorely Creek	Des Moines
206	3145A	Miller Creek	5	655	38	53	2005		S 156th Wy	At 9th Ave S	Miller Creek	SeaTac
207	3164	Cedar Grove	9	687	26	180	1962		Cedar Grove Rd	0.2 Mi NE of SR 169	Cedar River	
208	3165	Cedar Mountain	9	657	50	291	2002		SE Jones Rd	0.5 Mi E of SR 169	Cedar River Trail	
209	3165A	Cedar Mt. Ramp	9	657	20	16	2003		Cedar Mtn Place SE	0.1 Mi E of SR 169	Cedar River Trail	
210	3166	Elliott	9	657	38	406	2005		154th PL SE	0.1 Mi N of SR 169	Cedar River	
211	3166A	Elliott Bike/Ped Xing	9	657	47	18	2005		Bike/Ped Pathway	0.6 Mi N of SR 169	152nd Ave SE	
212	3176	Peter Western	8	654	24	181	1950		S 116th St	0.3 Mi W of SR 99	Drainage ditch-relief	
213	3176A	Puget S. HS OX	8	625	5.5	326	1959	1996	Pedestrian OX	1st Ave S & SW 126	SR 509	
214	3179	South Park	8	625	40	1285	1931		14/16th Ave S	0.8 Mi N of SR 99	Duwamish River	
215	3184	Judd Creek	8	683	24	370	1953		Vashon Hwy SW	0.1 Mi S of Quartermaster	Judd Creek	

	Bridge Number	County Bridge Name	County Council District	Thomas Guide Page	Width	Length	Year Built	Year Rebuilt	Facilities Carried	Location	Feature Bridge Crosses	Jurisdiction
216	3188	Newaukum Creek	9	777	30	24	1927		SE 400th St	1 Mi E of 212th Ave SE	Newaukum Creek	
217	3194	Wynaco	7	747	26	195	1964	2004	168th Way SE	Auburn-Black Diamond	Covington Creek	
218	3198	Semanski	9	838	28	37	1963		252nd Ave SE	0.1 Mi S of SR 410	Boise Creek	
219	3201	SE 424th St	9	808	22.8	16	1951		SE 424th St	0.6 Mi W of 284th Ave SE	Watercress Creek	
220	3205	Soos Creek	9	717	22.8	16	1951		172nd Ave SE	0.2 Mi N of SE 240th	Soos Creek	
221	3216	Green River	7	716	48	250	1990		83rd Ave S	On S Central Ave-Kent	Green River	1/2 Kent
222	3217	Overflow Channel	7	716	48	62	1990		83rd Ave S	On Central Ave-Kent	Cattle Crossing	
223	3220	Black Nugget	3	598	38	32	1992		Black Nugget Rd	0.2 Mi N of Iss-Fall City Rd	N Fork Issaquah Creek	
224	4001	196th - 200th Street	5	685	76.4	308	1998		196th - 200th Street	1 Mi SW of SR 181	Green River	1/2 Kent
225	427I	Cherry Ck	3	509	26	101	1960		NE Cherry Valley Rd	2.6 Mi E of SR 203	Cherry Creek	
226	4400	Rock Creek Culvert	9	718	90	90	2003		SE 248th St	1 Mi E of SR 169	Rock Creek	
227	5003	Harris Creek	3	539	34	80	2005		Kelly Rd NE	2 Mi NE of SR 203	Harris Creek	
228	5005	May Creek	9	627	22.8	16	1950		SE May Valley Rd	0.1 Mi E of SR 900	May Creek	
229	5007	Kelly Road	3	509	27	16	1959		Kelly Rd NE	1 Mi N of NE Lk Joy	Drainage ditch	
230	5008	Kelly RD Cherry Ck	3	509	27.2	72	1947	2004	NE Cherry Valley Rd	0.2 Mi S of Cherry Vly Rd	Cherry Creek	
231	5009B	Snoq Valley Rd	3	538	22.8	16	1951		W Snoq Valley Rd	0.5 Mi N of Ames Lk Rd	Drainage ditch	
232	5011	Shults	3	537	15	27	1953		NE 106th St	0.1 Mi E of Avondale Rd	Bear Creek	
233	5015	Lower Swamp Ck	1	476	22.8	47	1951		NE 175th St	1 Mi W of SR 522	Swamp Creek	Kenmore
234	5024	Carnation Farm Rd	3	568	34	60	1997		NE Carnation Farm	0.6 Mi W of SR 203	Slough	
235	5024A	Patterson Ck	3	539	18	18	1938	1971	264th Ave SE	0.1 Mi S of SR 202	Patterson Creek	
236	5028	Carn Farm Rd Slough	3	539	34	40	1998		NE Carnation Farm	0.2 Mi W of SR 203	Slough	
237	5032	Stossel Creek	3	163	16	30	1947	1967	Stossel Ck Rd	6.2 Mi NE of Kelly Rd	Stossel Creek	
238	5034A	Lake Joy	3	539	22.8	16	1950		346th Pl NE	On NE Lake Joy Rd	Lake Joy Creek	
239	5042	Cottage Lake Ck	3	507	35	35	1975		NE 130th St	0.1 Mi W of Avondale Rd	Cottage Lake Creek	
240	5043	Old North Bend Wy	3	630	52	92	1941		North Bend Way	0.4 Mi SE of Meadowbk	Kimball Creek	
241	5044	4 Creek Ranch	9	658	28	42	1983		229 Drive SE	0.5 Mi S of SE May Vlly	Issaquah Creek	
242	5045	McDonald Highland	1	505	7.8	90	1982		School Ped OX	0.1 Mi W of Juanita Dr NE	NE 151 St	Kenmore
243	5046	Preston Front Rd	3	629	28	316	1974		Upper Preston Road	0.1 Mi SE of I-90	Raging River	
244	5017	Hamlin Road	1	479	21	16	1949		Hamlin Road NE	0.1 Mi NE of SR 522	McAleer Creek	Lk Forest Pk
245	6002	Marymoor Park	3	537	26	115	1963		Park entrance road	In Marymoor Park	Sammamish Slough	KC Park
246	AUBURN-01	Levi-Ballard	7	776	26	250	1967		R Street SE	1.2 Mi N of Pierce Co	Stuck River	Auburn

	Bridge Number	County Bridge Name	County Council District	Thomas Guide Page	Width	Length	Year Built	Year Rebuilt	Facilities Carried	Location	Feature Bridge Crosses	Jurisdiction
247	AUBURN-02	BNRR over F St	7	746	20	120	1910		BNRR	0.2 Mi E of Jct SR 164	F St SE	Auburn
248	AUBURN-03	BNRR over Ellingson	7	775	33.4	75	1974		BNRR	2.8 Mi S of Jct SR 18	Ellingson Rd	Auburn
249	AUBURN-04	15th NW (UPRR OC)	7	745	56	228	1972		15th St NW	0.3 Mi E of Jct SR 167	UPRR	Auburn
250	AUBURN-05	15th NW (BNRR OC)	7	745	56	304	1972		15th St NW	0.6 Mi E of Jct SR 167	BNRR & B St NW	Auburn
251	AUBURN-06	BNRR over	7	746	16.3	161	1994		BNRR	0.1 Mi N of Jct SR 18	Auburn Way South	Auburn
252	AUBURN-07	BNRR over A St SE	7	746	34	74	1974		BNRR	0.5 Mi W of Jct SR 164	A Street SE	Auburn
253	AUBURN-08	29th St NW (Mill Ck)	7	745	24.2	16	1950		29th St NW	0.12 Mi E of SR 167	Mill Creek	Auburn
254	AUBURN-10	Supermall Flyover	7	745	28.8	477	1995		15 SW to Supermall	0.2 Mi E of Jct SR 167	15th St SW	Auburn
255	AUBURN-11	3rd St SW/NB	7	745	39.8	80	2002		3rd St SW	0.3 Mi W of SR 18	Sound Transit P& R	Auburn
256	AUBURN-12	3rd St SW/SB	7	745	47	141	2002		3rd St SW	0.3 Mi W of SR 18	C St SW	Auburn
257	AUBURN-13	3rd St SW	7	745	104.5	122	2002		3rd St SW	0.3 Mi W of SR 18	BNSF RR	Auburn
258	AUBURN-14	3rd St SW	7	745	65	69	2002		3rd St SW	0.3 Mi W of SR 18	A St SW	Auburn
259	AUBURN-15	S 277th St	7	715	48	271	2003		S 277th St	0.5 Mi East of SR 167	UPRR	Auburn
260	AUBURN-16	S 277th	7	715	60	142	2003		S 277th St	0.5 Mi East of SR 167	BNSF RR	Auburn
261	KENT 1	South Fragger Bridge	7	715	28	66	1950		Fragger Rd	0.4 Mi S Jct SR 516	Green River	Kent
262	KENT 2	North Fragger Bridge	7	715	29	78	1958		Fragger Road	1.2 Mi N Jct SR 516	Green River	Kent
263	KENT 3	Garrison Crk S 218th St	5	686	24	16	1952		218th Street	1 Mi E of Jct SR 167/S 218th	Garrison Creek	Kent
264	KENT 4	Green River Truss Br	5	715	32	245	1958		W Meeker St	0.1 Mi E of Jct SR 516	Green River	Kent
265	KENT 5	Rock Creek	9	718	28	16	1958		Kent Kangley Rd	0.5 Miles E Jct SR 169	Rock Creek	Kent
266	KENT 6	10th Ave Bridge	5	716	59	159	1998		108th Ave SE	27400 108th Way SE	SE 274th Way	Kent
267	KENT 7	Don E Wickstrom Bridge	7	716	81	467	2001		S 277th St	0.1 Mi E of Central Ave S	Green River	Kent
268	KENT 8	196th St Bridge	5	685	68	1249	2000		S 196th Street	7200 S 196th Street	BNSF RR, UPRR	Kent
269	PACIFIC-1	Stuck River	7	775	48	290	1991		A Street SE	0.6 Mi N of Pierce Co	Stuck River	Pacific
270	SKYKOM-10	Maloney Creek	3	515	34.4	54	1982		Old Cascade Hwy	0.1 Mi W of 5th Street	Maloney Creek	Skykomish

TABLE TWO - INVENTORIED BRIDGES OWNED BY CITIES

	Bridge No.	Bridge Name	Thomas Guide Page	Jurisdiction
1	AUBURN-01	Levi-Ballard	776	Auburn
2	AUBURN-02	BNRR over F Street	746	Auburn
3	AUBURN-03	BNRR over Ellingson	775	Auburn
4	AUBURN-04	15th NW (UPRR OC)	745	Auburn
5	AUBURN-05	15th NW (BNRR OC)	745	Auburn
6	AUBURN-06	BNRR over Auburn Way S	746	Auburn
7	AUBURN-07	BNRR over A Street SE	746	Auburn
8	AUBURN-08	29th St NW (Mill Creek)	745	Auburn
9	AUBURN-09	44th St NW (Mill Creek)	715	Auburn
10	AUBURN-10	Supermall Flyover	745	Auburn
11	AUBURN-11	3rd Street SW/NB	745	Auburn
12	AUBURN-12	3rd Street SW/SB	745	Auburn
13	AUBURN-13	3rd St SW/BNSF OX	745	Auburn
14	AUBURN-14	3rd Street SW	745	Auburn
15	AUBURN-15	S 277th St Over UPRR	715	Auburn
16	AUBURN-16	S 277th St Over BNSF	715	Auburn
17	3139	Saltwater State Park	715	Des Moines
18	3142	North Twin	715	Des Moines
19	3143	South Twin	715	Des Moines
20	3005	Hylebos Creek	774	Federal Way
21	5015	Lower Swamp Creek	476	Kenmore
22	5045	McDonald Highland	505	Kenmore
23	1071AE	East Kenmore	475	Kenmore
24	1071AW	West Kenmore	475	Kenmore
25	264X	Swamp Creek	476	Kenmore
26	Kent 1	South Fragger Bridge	715	Kent
27	Kent 2	North Fragger Bridge	715	Kent
28	Kent 3	Garrison Creek S 218th St	686	Kent
29	Kent 4	Green River Truss Bridge	715	Kent
30	Kent 5	Rock Creek	718	Kent
31	Kent 6	108th Ave Bridge	716	Kent
32	Kent 7	Don E Wickstrom Bridge	716	Kent
33	Kent 8	196th Street Bridge	685	Kent
34	C/S-1	212th St Green River Bridge	685	Kent
35	1814	Mill Creek	715	Kent
36	1815	Mill Creek Arch	715	Kent
37	1817	Green River Box Girder Bridge	715	Kent
38	3104	Soos Creek	716	Kent
39	3105	Soos Creek	716	Kent
40	5017	Hamlin Road	479	Lake Forest Park
41	264Z1	McAleer Creek	475	Lake Forest Park
42	264Z2	McAleer Creek	475	Lake Forest Park
43	264Z3	McAleer Creek	475	Lake Forest Park
44	3092	Lake Wilderness OX	717	Maple Valley
45	3094OX	Gravel Pit OX	717	Maple Valley
46	3098OX	Maple Valley SE 263rd OX	718	Maple Valley

	Bridge No.	Bridge Name	Thomas Guide Page	Jurisdiction
47	1014B	Overlake Drive	566	Medina
48	1014C	Overlake Drive	566	Medina
49	368B	May Creek Trestle	626	Newcastle
50	1052A	Sylvester Road SW	654	Normandy Park
51	1111-1	Miller Creek Road	654	Normandy Park
52	1135-1	North Bend #1	630	North Bend
53	1135-2	North Bend #2	630	North Bend
54	1135-3	North Bend #3	660	North Bend
55	1135-4	North Bend #4	660	North Bend
56	1135-5	North Bend #5	660	North Bend
57	1135-6	North Bend #6	630	North Bend
58	1135-7	North Bend #7	630	North Bend
59	PACIFIC -1	Stuck River	775	Pacific
60	10	Leary Way	537	Redmond
61	20	NE 85th Street	537	Redmond
62	30	Sixty-01 UX	536	Redmond
63	45	Union Hill	537	Redmond
64	50	Bear Creek	537	Redmond
65	70	148th Avenue	537	Redmond
66	90	NE 90th Street	537	Redmond
67	119A	Novelty Hill	537	Redmond
68	1730A	Bear Creek	537	Redmond
69	1011A3	Inglewood	567	Sammamish
70	422A	Beaver Lake Trestle	598	Sammamish
71	3145A	Miller Creek	655	SeaTac
72	167AOX	Richmond Beach OX	474	Shoreline
73	167C	Hidden Lake	474	Shoreline
74	SKYKOMISH-10	Maloney Creek	515	Skykomish
75	1413B	South Fork Kimball Creek	630	Snoqualmie
76	1413C	East Fork Kimball Creek	630	Snoqualmie